Are people with dementia motivated for a serious game? (Poster)

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Published in:
Gerontology

DOI:
10.4017/gt.2018.17.s.173.00

Publication date:
2018

Document Version
Publisher's PDF, also known as Version of record

L. SNAPHAAN, I. GEERTS, L. BURGMANS, I. BONGERS. Are people with dementia motivated for a serious game? Gerontechnology 2018;17(Suppl):178s; https://doi.org/10.4017/gt.2018.17.s.173.00 **Purpose** Dementia is a broad category of neurocognitive disorders characterized by a long term and often gradual decrease. Most interventions, however, have involved unimodal therapy and have demonstrated limited effectiveness[1]. Non-pharmacological interventions for meaningful treatment of dementia should consist of multiple components[2]. Furthermore, different studies showed that social activities and physical activities have a significant positive impact on the delay progress of dementia, although a fundamental problem is motivation to perform the daily exercise[3]. Therefore PLAYTIME (=Playful Multimodal Daily Training, Diagnostics and Recommendation System within a Social Network) develops a serious game with innovative sensing technologies to enhance the quality of life of people with dementia. It motivates in a playful manner to stimulate cognitive processes, to address physical activities and foster social inclusion at the same time. The objective of the project PLAYTIME is to motivate people with dementia to enter a positive feedback cycle of periodic training with sensors that enable diagnostics on a daily basis, and to receive recommendations on the basis of these data that propose more personalized and better suited exercises for improved training. The motivation is primarily triggered by the following three aspects of PLAYTIME: (1) Positive affection achieved from social engagement in playful group gatherings; (2) Multimodal training modules, including a cognitive module (e.g. multiple choice, puzzles, spot-the-difference, memory), a socio-emotional module (e.g. how to handle in realistic scenarios), and a movement module (e.g. movement exercises), to offer the user playful experience at home and group gatherings; and (3) The involvement and improvement of activities of daily living. **Method** An explorative field study of two weeks among 10-15 persons living with dementia at home will be conducted to evaluate the acceptability, appropriateness, usability, feasibility and safety of the PLAYTIME prototype and look for improvement opportunities for the main field study. User feedback, in terms of physical cognitive performance, physical activity and eye-tracking movements, will provide diagnostics to determine personalized recommendations and, in turn, optimize user experience. The PLAYTIME suite will contain an interactive mat for group gatherings, a mobile app, a Tablet PC, a MoveMonitor, and software for web camera based eye movement analysis. **Results & Discussion** The study will be conducted in collaboration with the following partners of the PLAYTIME project: Geestelijke gezondheidszorg Eindhoven en de Kempen (NL) , FAMEL (AT) , MindBytes (BE), McRoberts (NL), Joanneum Research (AT), Tilburg University (Tranzo) (NL), University Gent (BE). All preparations for the first field study are ready. In March 2018, the first participants will be tested.

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Keywords: social innovation, dementia, serious games, assistive technology
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